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| Topic | IB and AP | IB only |
| 1.1 Statistical Analysis | **IB ONLY** | All |
| 2.1 Cell theory | 2.1.6-2.1.9 | 2.1.1-2.1.5, 2.1.10 |
| 2.2. Prokaryotic cells | All |  |
| 2.3 Eukaryotic cells | All |  |
| 2.4 Membranes | All |  |
| 2.5 Cell division | All in general | Names for stages of mitosis. |
| 3.1 Chemical elements and water | All except 3.1.2 and 3.1.3 | Names and functions of minor elements. |
| 3.2 Carbohydrates, lipids and proteins | 3.2.1, 3.2.2, 3.2.5-3.2.7 | Examples and functions of types of carbohydrates (3.2.3 and 3.2.4) |
| 3.3 DNA structure | All |  |
| 3.4 DNA replication | All |  |
| 3.5 Transcription and Translation | All |  |
| 3.6 Enzymes | All except 3.6.5 | Explain the use of lactase in lactose-free milk |
| 3.7 Cell respiration | All |  |
| 3.8 Photosynthesis | All |  |
| 4.1 Chromosomes, genes, alleles and mutations | All |  |
| 4.2 Meiosis | 4.2.1-4.2.4 in general | 4.2.5-4.2.7 (Karyotyping)  Names for stages of meiosis. |
| 4.3 Theoretical genetics | All |  |
| 4.4 Genetic engineering and biotechnology | All in general | IB requires a much more in-depth understanding of genetic engineering techniques |
| 5.1 Communities and ecosystems | All |  |
| 5.2 The greenhouse effect | All |  |
| 5.3 Populations | All |  |
| 5.4 Evolution | All |  |
| 5.5 Classification | **IB ONLY** | All |
| 6.1 Digestion | 6.1.2, 6.1.5, 6.1.7 | 6.1.1, 6.1.3, 6.1.4, 6.1.6 |
| 6.2 The transport system | **IB ONLY** | All |
| 6.3 Defence against infectious disease | 6.3.1, 6.3.3-6.3.6 | 6.3.2, 6.3.7, 6.3.8 (How HIV works, social effects) |
| 6.4 Gas exchange | **IB ONLY** | All |
| 6.5 Nerves, hormones and homeostasis | All |  |
| 6.6 Reproduction | **IB ONLY** | All |
| 7.1 DNA structure | 7.1.1, 7.1.5 | 7.1.2-7.1.4 (nucleosomes, single-copy genes vs repetitive sequence genes) |
| 7.2 DNA replication | All |  |
| 7.3 Transcription | All |  |
| 7.4 Translation | All but 7.4.1 | I don't teach 7.4.1 anyway |
| 7.5 Proteins | All |  |
| 7.6 Enzymes | All |  |
| 8.1 Cell respiration | All but 8.1.1 | 8.1.1 (oxidation/reduction) |
| 8.2 Photosynthesis | All but 8.2.7 | 8.2.7 (action spectrum/absorption spectrum) |
| 9.1 Plant structure and growth | 9.1.7 (Phototropism) | 9.1.1-9.1.6 |
| 9.2 Transport in Angiospermophytes | 9.2.7-9.2.10 (Transpiration and abiotic factors that affect it--I think this is optional though, just as an example) | 9.2.1-9.2.6, 9.2.11 |
| 9.3 Reproduction in angiospermophytes | 9.3.4-9.3.6 (Seed germination and control of flowering) | 9.3.1-9.3.3 |
| 10.1 Meiosis | All |  |
| 10.2 Dihybrid crosses and gene linkage | All |  |
| 10.3 Polygenic inheritance | I can't find "polygenic inheritance" in AP but I bet they would want you to know about it. |  |
| 11.1 Defence against infectious disease | 11.1.1-11.1.4, 11.1.6 | 11.1.5, 11.1.7 (monoclonal antibodies, benefits and dangers of vaccination) |
| 11.2 Muscles and movement | **IB ONLY** | All |
| 11.3 The kidney | **IB ONLY** | All |
| 11.4 Reproduction | 11.4.9, 11.4.15 (fertilization, positive feedback during pregnancy) | 11.4.1-11.4.8, 11.4.10-11.4.14 |
| D.1 Origin of Life on Earth | D.1.1-D.1.5, D.1.7 | D.1.6, D.1.8 (protobionts, endosymbiotic theory--but I think you have to teach that) |
| D.2 Species and Speciation | D.2.1-D.2.7, D.2.11 | D.2.8-D.2.10 (Convergent and divergent, gradualism and punctuated equilibrium, transient polymorphism) |
| D.3 Human evolution | D.3.1-D.3.3 (Carbon dating--but AP does not require details)  D.3.7 Incompleteness of fossil record | D.3.4-D.3.6, D.3.8-D.3.10 |
| D.4 Hardy-Weinberg Principle | All |  |
| D.5 Phylogeny and systematics | All |  |
| E.1 Stimulus and response | All |  |
| E.2 Perception of stimuli | E.2.1 (types of receptors) | E.2.2-E.2.7 |
| E.3 Innate and learned behavior | All |  |
| E.4 Neurotransmitters and synapses | All--though AP probably could use some of these topics as examples only |  |
| E.5 The human brain | E.5.1-E.5.4 | E.5.5-E.5.7 (Pupil reflex, brain death, pain) |
| E.6 Further studies of behavior | All |  |